

V - Claims

Having thus specially described and determined the nature of this invention, and since it can be put into use, the following is claimed as exclusive right and property:

1) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER: of the type that, since it can be introduced endoluminally into a vascular channel for application, comprises a prosthetic body with cylindrical walls and open bases that can be radially expanded up to the limit at which its external surfaces contact the damaged vascular walls of the above-cited vascular channel, with the internal surfaces of said body forming a prosthetic circulatory passage; characterized in that it comprises:

a) a number of connectors that, distributed such that they encircle the cylindrical walls of the prosthetic body, are attached to the internal surfaces of said cylindrical walls;

b) in each connector, the rotary end disconnectable from a respective semi-flexible cable as an applicator of sutures, which cable extends beyond said prosthetic passage, terminating in an external rotary control end; and

c) passing through each connector and the adjacent cylindrical wall of said prosthetic body, a respective spiral suture, the anchoring end of which is inserted in said rotary end of its respective semi-flexible cable.

2) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER, pursuant to Claim 1: characterized in that the connectors consist of parts in the shape of small disks, the base of which constitutes a penetration stop for the anchoring end of the respective spiral suture.

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3) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER, pursuant to Claim 1: characterized in that the external control ends of the semi-flexible cables form connecting ends with a rotary device.

4) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER, pursuant to Claim 1: characterized in that the spiral sutures pass through the connectors and the walls of the prosthetic body between two alternative end positions: one for prosthetic positioning, in which its anchoring ends are inserted in the ends of its respective semi-flexible cables; and another prosthetic-placement position in which the sharp ends of said spirals protrude through the prosthetic walls and pass through vascular walls for the application.

5) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER, pursuant to Claim 1: characterized in that the walls of the prosthetic body are composed of a thermo-expandable material.

6) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER, pursuant to Claim 1: characterized in that the connectors encircle the interior of the cylindrical walls, lining them in circular fashion.

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Claim One

1) ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER: of the type that, since it can be introduced endoluminally into a vascular channel for application, comprises a prosthetic body with cylindrical walls and open bases that can be radially expanded up to the limit at which its external surfaces contact the damaged vascular walls of the above-cited vascular channel, with the internal surfaces of said body forming a prosthetic circulatory passage; characterized in that it comprises:

a) a number of connectors that, distributed such that they encircle the cylindrical walls of the prosthetic body, are attached to the internal surfaces of said cylindrical walls;

b) in each connector, the rotary end disconnectable from a respective semi-flexible cable as an applicator of sutures, which cable extends beyond said prosthetic passage, terminating in an external rotary control end; and

c) passing through each connector and the adjacent cylindrical wall of said prosthetic body, a respective spiral suture, the anchoring end of which is inserted in said rotary end of its respective semi-flexible cable.

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TECHNICAL SHEET

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XX Invention

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(54) Title: "ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER"

(57) Summary, Keywords and Drawing or Formula:

ENDOVASCULAR PROSTHESIS WITH SUTURE HOLDER. Said prosthesis comprises prosthetic body (b) on the internal surfaces (2) of which a number of connectors (4) are distributed and attached that, on the one hand, connect respective semi-flexible cables (b) ending in external rotary control ends (9'), while, on the other hand, they are passed through by respective spiral sutures (6) controlled by said semi-flexible cables (b). Once prosthetic body (b) is expanded, its external surfaces (3) are in contact with vascular walls (1). With this arrangement, the rotary actuation of semi-flexible cables (c) permits penetration ends (6') of spirals (6) to pass through vascular walls (5). This penetration continues until anchoring ends (7) of above-cited spirals (6) stop against bases (4') of respective connectors (4). In this manner, a firm union is created between vascular channel (a) and prosthetic body (b).

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